

LV20Q100F

Rev.F Mar.-2016

/ Descriptions

TO-220F

Schottky Barrier Diode in a TO-220F Plastic Package.

/ Features

Low forward voltage drop, low power losses, High efficiency operation.

/ Applications

OR-ing

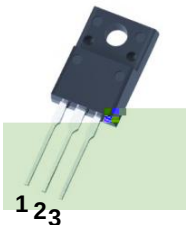
DC-DC

For use in high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode

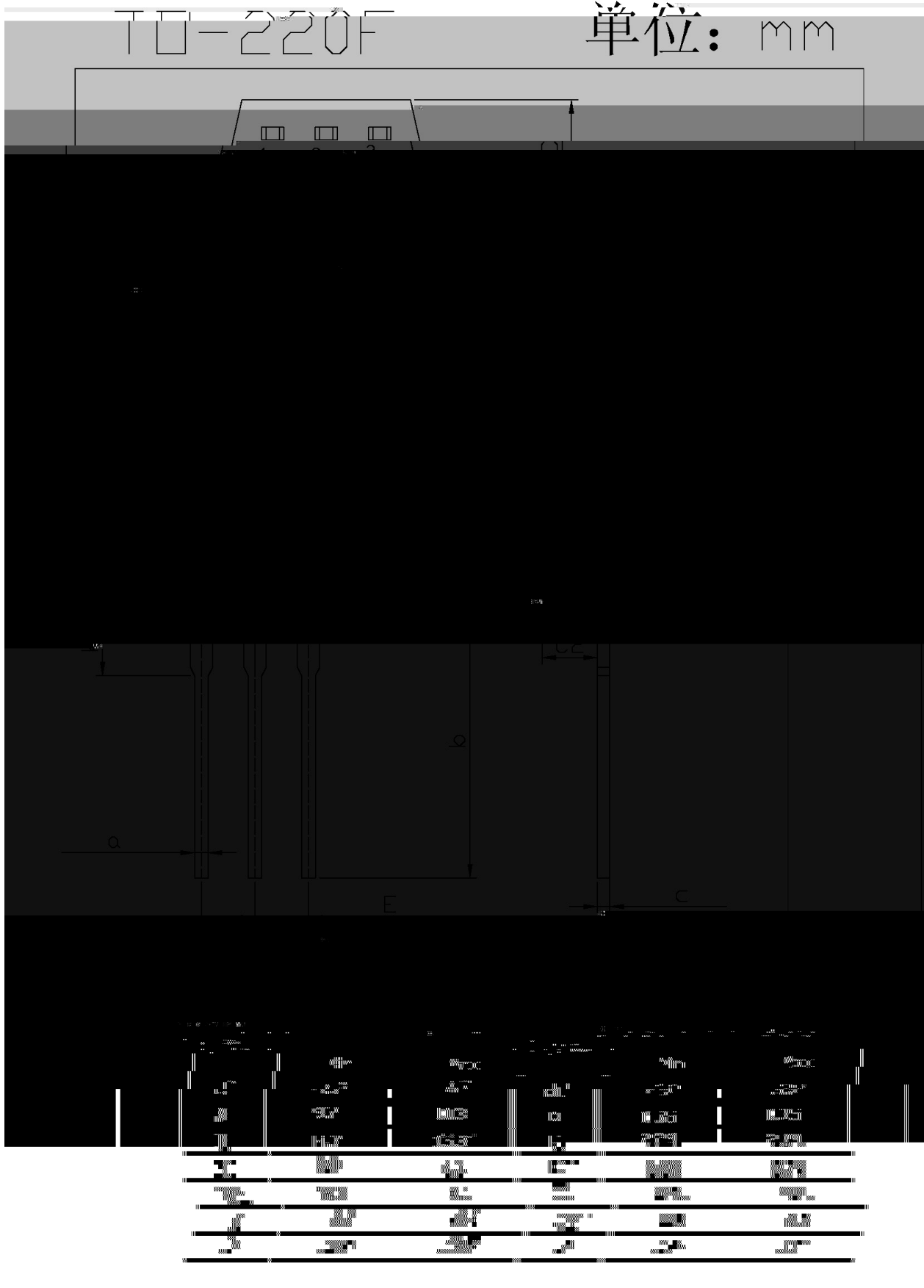
/ h_{FE} Classifications & Marking

See Marking Instructions.

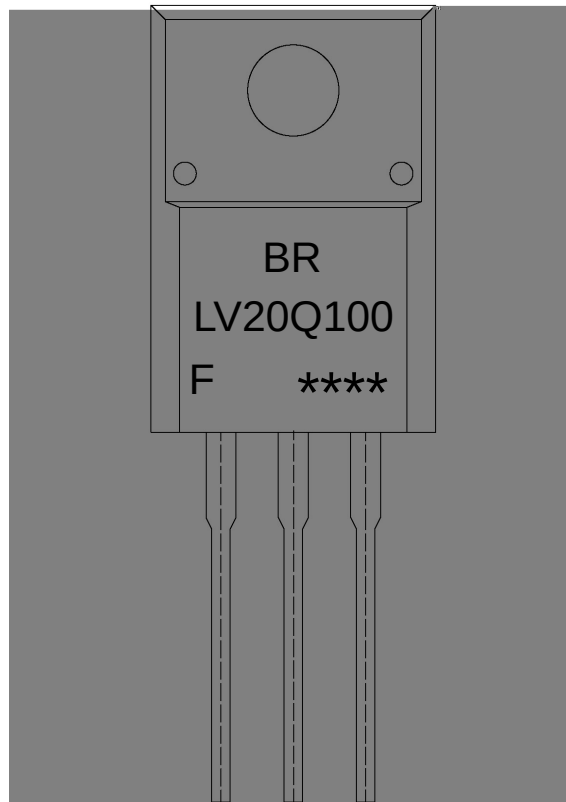
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RM}	100	V
Working Peak Reverse Voltage	V_{RSM}		
Average Rectified Forward Current	$I_{F(AV)}$	1×20	A
Non Repetitive Peak Surge Current	I_{FSM}	160	A
Thermal Resistance Junction to Case	R_{JC}	4.6	/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	

Parameter	Symbol	R				
Breakdown Voltage	V_{BR}	$I = 1mA(Ta=25^\circ C)$	100			V
Forward Voltage	V_F	$I_F = 5A(Ta=25^\circ C)$		0.516		V
		$I_F = 10A(Ta=25^\circ C)$			0.60	V
		$I_F = 5A(Ta=125^\circ C)$		0.455		V
		$I_F = 10A(Ta=125^\circ C)$			0.58	V
Instantaneous Reverse Current	I_R Note 1	$V_R = 100V(Ta=25^\circ C)$			150	A A

/ Package Dimensions



/ Marking Instructions



BR

LV20Q100

F:

Note:

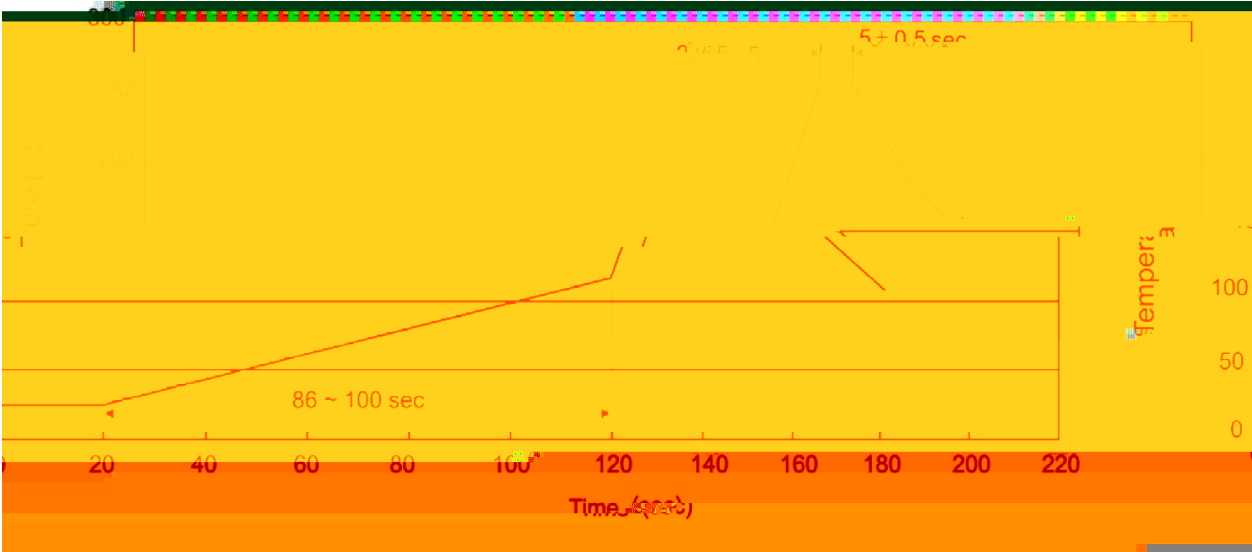
BR: Company Code

LV20Q100: Product Type

F: Package Code

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units	Dimension	(unit mm ³)
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